

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 5 Claim 1 (currently amended): A method for optimizing a playout delay of packets being transmitted within a network, said packets comprising data for playout in a stream and compressed according to a codec, said network having a network delay of packet transmission, the method comprising:
- 10 (a) determining a loss mean opinion score (LMOS) and a delay mean opinion score (DMOS) of a previous packet according to the codec;
- (b) calculating an estimated playout delay for a current packet based on the LMOS of the previous packet and the DMOS of the previous packet; and
- (c) calculating a plurality of other estimated playout delays for the current packet;
- 15 (d) calculating a mean mean opinion score (MMOS) of each estimated playout delay of the plurality of estimated playout delays;
- (e) selecting an estimated playout delay having an maximum MMOS from the plurality of estimated playout delays; and
- 20 ~~[[c)]~~ (f) delaying playout of the current packet by the selected estimated playout delay.

Claim 2 (cancelled)

Claim 3 (currently amended): The method of claim ~~[[2]]~~ 1 further comprising:

- 25 ~~[[d)]~~ (g) calculating a mean network delay variance of the current packet;
- ~~[[e)]~~ (h) determining a playout scaling factor; and
- wherein in (b) the estimated playout delay is calculated further based on the mean

network delay variance of the current packet and the playout scaling factor.

Claim 4 (cancelled)

- 5 Claim 5 (currently amended): The method of claim [[4]] 1 wherein the plurality of other estimated playout delays calculated in [[(f)] (c)] comprises:
a playout delay of the previous packet;
a playout delay of the previous packet increased by a step size; and
a playout delay of the previous packet decreased by a step size.

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Claim 6 (currently amended): The method of claim [[4]] 1 wherein the calculated MMOS depends on a codec delay, the network delay, the estimated playout delay, and a packet loss rate.

- 15 Claim 7 (original): The method of claim 6 wherein the MMOS is a measure of playout quality, and a high MMOS corresponds to a high playout quality.

Claim 8 (original): The method of claim 1 wherein the packets contain audio or video information.

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Claim 9 (original): The method of claim 1 wherein the playout of the packets is for a voice over Internet protocol (VoIP), streaming audio, or streaming video application.

- 25 Claim 10 (original): The method of claim 1 wherein the network is a computer network or a radio transmission network for wireless phones.

Claim 11 (currently amended): A playout device for playing data contained in packets

with an optimized delay, said packets being transmitted within a network and comprising data for playout in a stream and compressed according to a codec, said network having a network delay of packet transmission, the playout device comprising:

5 a playout buffer for receiving and buffering packets;

a playout controller for determining estimated playout delays of packets from estimated network delays and codec information, and for controlling the playout buffer according to selected playout delays;

10 a network delay estimator for calculating estimated network delays of packets and sending estimated network delays to the playout controller; and

a codec detector for detecting the codec to which the packets are compressed and sending codec information to the playout controller for determining a loss mean opinion score (LMOS), a delay mean opinion score (DMOS), and a mean mean opinion score (MMOS) for packets;

15 wherein the playout controller selects a playout delay for a current packet having a maximum MMOS from a plurality of estimated playout delays that comprises a playout delay of a previous packet; a playout delay of the previous packet increased by a step size; a playout delay of the previous packet decreased by a step size; and a playout delay based on the LMOS of
20 the previous packet, a mean network delay variance of the current packet and a playout scaling factor.

Claim 12 (original): The playout device of claim 11 further comprising:

a receiver through which the playout buffer receives packets from the network;

25 and

a media output device to which the playout buffer outputs packets.

Claim 13 (cancelled)

Claim 14 (cancelled)

Claim 15 (cancelled)

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Claim 16 (currently amended): The playout device of claim ~~[[15]]~~ 11 wherein the playout delay is based on the LMOS of the previous packet, a mean network delay variance of the current packet and a playout scaling factor further depends on the MMOS of the previous packet.

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Claim 17 (currently amended): The playout device of claim ~~[[13]]~~ 11 wherein the playout controller determines the MMOS of the current packet for each of the estimated playout delays referencing a codec delay, the network delay, the estimated playout delay, and a packet loss rate.

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Claim 18 (original): The playout device of claim 11 wherein the network is a computer network or a radio transmission network for wireless phones.

Claim 19 (original): The playout device of claim 12 wherein the media output device is a
20 voice over Internet protocol (VoIP) player, a streaming audio player, or a streaming video player.